### STATE OF ILLINOIS

### **ILLINOIS COMMERCE COMMISSION**

ILLINOIS POWER COMPANY	)		
Proposed General Increase	)	04-0476	
in Natural Gas Rates	)		

# REBUTTAL TESTIMONY OF LEE SMITH LA CAPRA ASSOCIATES

### ON BEHALF OF BUSINESS ENERGY ALLIANCE AND RESOURCES

December 27, 2004

BEAR Exhibit 2

1 <b>I.</b>	INTRODUCTION
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### 3 Q. What is your name and business address?

- 4 A. My name is Lee Smith, and I work for La Capra Associates, 20 Winthrop Square,
- 5 Boston, Massachusetts.

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- 7 Q. Have you previously submitted testimony in this proceeding?
- 8 A. Yes, I have.

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### 10 **Q.** Please summarize your original testimony.

- 11 A. My testimony demonstrated that the proposed SC 66 created unreasonable bill 12 impacts on grain dryers. My analysis found that the Company overallocated costs 13 to the customers in the proposed SC 66, and thus the new rate is not cost based.
- In addition, the provision that will penalize these customers for using gas when
- the temperature is below 32 degrees is not justified and should be rejected.

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### Q. Do you have any corrections to your original testimony?

- 18 A. Yes. Mr. Jones' misuse of my Exh. LS-3 caused me to reexamine this exhibit and
- 19 find that it combined meter installation and meter costs incorrectly. This exhibit
- was designed to illustrate the variation in meter costs among customers on SC 67
- and 68. However, there is a problem with the combination of plant costs, which
- does not change the conclusion regarding the difference in costs, but does appear
- to have created some confusion. I will describe this in more detail and correct the
- 24 exhibit later. The Company has utilized these numbers in an incorrect way, which
- has led to a misallocation in its rebuttal testimony. The Company used the
- numbers in my exhibit in its calculation of its amended rate allocation and rate
- design. Therefore, this correction affects not only my testimony, but also the
- Company's rebuttal testimony and revised rates found in its rebuttal testimony.

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### Q. What is the purpose of your rebuttal testimony?

- 1 A. I am responding to the rebuttal testimonies of Ms. Althoff and Mr. Jones, 2 particularly their revisions to the allocated cost of service study.
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### 4 Q. Please summarize your rebuttal testimony.

5 A. I believe that the proposed grain dryer rate is much too high. I find it amazing 6 that IP's rebuttal testimony has resulted in an SC 66 that is so much higher than 7 the original proposed rate. This result has occurred because the Company has 8 made an allocation error that significantly overstates SC 66 costs. Additionally, 9 not only is the rate too high, but the Company underestimates impact of these 10 rates on grain dryers. Given the fact that grain dryers make virtually no 11 contribution to the system peak, the final rate for grain dryers should be less than 12 alternative C&I rates. Yet the Company is requesting that most of them pay more 13 on SC 66 than on the alternative rates.

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- Q. What do you mean by describing the grain dryer rates as "too high"?
- A. Rates might be too high in comparison to existing rates, too high in relation to alternative rate options, too high in relation to cost of service, or too high in relation to competition competition for grain drying business, and competition for grain dryers' business. In this case the proposed rate is too high according to all of these definitions.

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- Q. What will the result be if IP sets grain dryers rates "too high" relative to the competitive market?
- A. Some grain dryers will go out of business. There are competing grain dryers in other utility territories in Illinois, and in Indiana. Some customers will find it worthwhile to pay more in shipping rather than to pay much higher costs for the grain drying service in IP territory. Others will switch to propane.

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Q. Should the Company be concerned that its proposed rate will cause it to lose grain drying customers?

A. Yes. In fact, in Docket 93-0180, an Illinois Power Company rate case, the Company first proposed S.C. 67 as a means of competing with propane and retaining grain dryer customers. Describing IP's proposal, the Commission stated:

Mr. Reynolds testified that since grain drying customers typically operate only during the late summer and fall months, they would probably switch to propane if they were required to pay a demand charge and the Rider B demand gas charge twelve months of the year, as would be required under S.C. 65. He stated that if these customers left IP's system, the remaining customers would be worse off. Mr. Reynolds pointed out that IP's revised MCOSS, sponsored by Mr. Jones, showed that revenues from S.C. 67 would more than recover marginal costs, thereby providing a positive contribution to fixed cost recovery.

Docket 93-0180, Order (April 6, 1994), at 207-208.

The Commission Staff witness "concurred in the need for S.C. 67 to meet the threat of competition for grain drying load." <u>Id.</u> The Commission concluded that "the need for proposed S.C. 67 is justified by the record and that it should be adopted." <u>Id.</u>

Because the Company has succeeded in persuading grain dryers to use natural gas, it will be wasteful to both other customers and to grain dryers to now drive some of these customers off the system. Because of the terms of SC 66, particularly the high customer charge, grain dryers may use propane when the marginal cost of natural gas would be less expensive than propane. Moreover, all of the facilities that were used by the customers who leave gas service will be underutilized and will no longer be supported through revenues from grain dryers. While some facilities, such as mains, may be useable to support increases in load by other customers, many facilities will go unused.

Q. Has Mr. Jones discussed the competitiveness of the grain dryer rate and propane?

A. Although Mr. Jones admits "...there is the possibility of some grain dryer customers switching to propane..." (Jones Rebuttal p. 24), he dismisses the weight to be given this possibility. Evidently the major factor in this dismissal was an analysis that the Company performed comparing propane and gas costs based on prices in September and October 2003. This was a very limited period for comparison, and a period in which oil and oil-based products were high and climbing. This analysis does not prove that propane cannot be an attractive alternative to SC 66. A grain drying customer that switched to propane would have the ability to purchase propane during the least expensive months, probably in the spring, and store it until needed. Moreover, the customer's energy costs would be determined largely by how much energy was used, and the customer would not have to pay the high monthly customer charges on SC 66 even when no grain drying and therefore no revenue was occurring.

## Q. Your original testimony cited the unreasonableness of the proposed increase on delivery bills. Has the Company responded to this?

A. Yes. Mr. Jones does not disagree that delivery rates will increase by an inordinate percentage, but argues that this does not matter because the majority of customers' total bill costs results from gas costs.

### Q. Do you have any response to that comment?

A. Yes. First, this is a case regarding delivery service rates, not gas costs. Second, there are a number of customers on SC 67 whose volumetric usage has been small, and who therefore will see increases in their total bills of as much as 50%. The Company focuses on the average customer, while there is a wide variation among SC 66 customers. The other bill impact problem for the grain dryers is the high customer charge, which must be paid every month even though most of the usage, and also of the grain dryers' revenue, occurs in very few months.

### Q. Are there other reasons to question why the grain dryer rate should be so high relative to alternative rates?

A. Yes. I note that IP's sister utilities, CIPS and CILCO have recently added low winter use rates that can be used by most grain dryers. Those low winter use rates, which are based on cost of service, are far lower than those of alternative rates. For example, CILCO charges low winter use customers ("Seasonal Rate 600") a distribution charge of 6.29 cents per therm for company owned gas and 5.03 cents per therm for customer supplied gas. Those rates are almost half those paid by customers taking service under Rate 600: 11.69 cents per therm for company supplied gas and 10.45 cents per therm for customer supplied gas. Similarly, CIPS charges Seasonal Rate 3 customers 4.5 cents per therm for company supplied gas and 1.92 cents per therm for customer supplied gas, while charging regular Rate3 customers 9.74 cents per therm for company supplied gas and 7.23 cents per therm for customer supplied gas. Again, grain dryers end up paying almost half the distribution charges of other customers with more regular annual usage patterns. I should add that both utilities charge seasonal rate customers the same monthly service charges as other customers in Rate 600 and Rate 3. IP has shown nothing in this proceeding that should distinguish it from CILCO and CIPS. There is no difference in the important cost characteristics of each company's customers – the grain dryers use gas in non peak periods and thus impose lower costs. Yet, only IP wants tariffs that with minimal discounts, and in many cases, that result in <u>higher</u> rates for grain dryers.

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### Q. Why do you argue that SC 66 is too high relative to alternative rates?

A. Since the alternative rates are designed for customers who contribute to the
Company's peak load, I would expect that a grain dryer on rate SC 66 would pay
considerably less than it would on SC 63, SC 64, or SC 65.

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### Q. What does the Company say regarding the relative cost of SC 66 and alternative rates?

A. Mr. Jones states that "...proposed SC 66 is the most economical choice for most existing SC 67 and SC 68 customers?" (Jones Rebuttal, p. 19)

### Q. Do you agree?

2 A. No. In Exh. IP 7.29, the Company compared bills under what it claimed to be 3 customer's alternate rates and SC 66. These calculations showed that the 35 4 customers who the Company believed were eligible for SC 65 would pay less in 5 delivery charges under SC 66 than under SC 65, but this result required that the 6 customers never pay a demand charge, i.e. never use gas on a day that was 7 projected to be less than 32 degrees. If these customers did use gas on a single 8 day colder than 32 degrees, most of them could pay more for delivery service on 9 SC 66 than on SC 65. The 44 customers eligible for SC 64 and SC 63 would all 10 pay more for delivery services under SC 66 than on the alternative rate. Some of 11 them would pay less under SC66, including the PGA, because they would pay 12 slightly less for gas. For most customers, delivery service would cost more under 13 SC 66 than under alternative rates.

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### Q. Why do you argue that SC 66 is too high relative to the cost of service?

A. My analysis of the Company's originally filed cost of service and rate resulted in the finding that the cost of service study allocated too much distribution costs to the SC 66 customers. As a result the proposed rate, which was based on this cost of service, was higher than a more appropriate allocation would justify. The Company's revised COSS compounds the problem by overallocating customer-related plant as well as demand-related costs to SC 66.

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### II. ALLOCATION OF COSTS

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- Q. What has changed in this proceeding that has caused the cost allocation to SC 66 to increase?
- A. The first change is that the Company responded to Mr. Ianello's criticism of its development of a services allocator by modifying it substantially, resulting in allocating less services to residential customers and more to commercial and

industrial customers. There were also changes to other customer-related plant allocators, which I will discuss later.

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### Q. Do you think that the modification to the service plant allocator is correct?

I think that the evidence indicates that Mr. Ianello was correct in believing that the Company misstated the relationship between steel and plastic in service pipes, partly because the sample was very small. The Company has done additional analysis and produced what seems to be a more reasonable estimate of the ratio between plastic and steel pipe. However, the Company's correction to its original estimated service allocator is based "...on current costs..." (Althoff rebuttal, p. 16) Ms. Althoff further testifies that steel prices have been climbing relative to plastic. The objective of an embedded cost of service study is to allocate historic costs to customer classes. If most existing plant costs resulted from a time when cost relationships between materials were different from the present, using current costs as a basis for allocation would not be correct. It is customary to use current costs for meters, etc, to develop weighted allocators, because it is usually assumed that current costs can serve as a reasonable proxy for historic costs. If steel pipe costs much more relative to plastic pipe than it did when most pipe was installed, and the Company is using this current cost ratio to allocate, the revised service plant allocation is not accurate.

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- Q. Has Mr. Jones responded to your argument that grain dryers' allocation of distribution capacity costs should reflect the fact that they do not use gas at the time of the system peak?
- A. Mr. Jones continues to argue that grain dryers should be responsible for a portion of the distribution capacity based not only on their average use but also on their peak use. Yet, in another portion of his testimony, Mr. Jones argues that Grain Drying and Asphalt customers should be in the same class because they use gas when the system is not at its peak, and they "...provide additional use of the Company's existing delivery system at little incremental cost." (IP Exh. 7.19, P. 18) Mr. Jones' admission that grain dryer customers create no incremental cost is

completely inconsistent with his allocation of some "excess" or "peak" to these customers. If grain dryers do not use gas during peaks, then cost of service principles require that they be allocated distribution capacity based on their average use, rather than peak use.

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## Q. Is it possible for grain dryers to impose some incremental main costs on the system?

Only to a limited extent, and even then, it would be at no cost to other rate payers. I believe that what he is referring to as incremental cost is any section of distribution main close to a grain drying customer that had to be sized to meet the fall load of the customer. I understand that, it may sometimes have been necessary to size some pipe to meet the fall load of grain dryers. This is the exception, not the norm; most plant is sized to meet the system peak. The Company and has been unable to identify any areas of IP's distribution system that were sized to meet grain dryers' peaks. Mr. Jones chooses to ignore the fact that most of the distribution system is sized to meet the system peak, and the grain drying customer is primarily using capacity on the distribution system that was built to meet the system peak and is underutilized during the grain drying season. Mr. Jones also ignores the fact that if a particular grain dryer required distribution system investment in excess of a reasonable amount, the customer will have been charged for any excess investment, per the Company's terms and conditions.

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### Q. You earlier said that the Company has changed the allocation of customerrelated plant, other than services. What were the causes of this change?

The Company originally estimated that 29 SC 66 customers had demands of more than 1000, and therefore would be assessed a higher customer charge. I testified that I believed this estimate was incorrect, and actual metered peaks would result in more customers paying the higher demand charge applicable to customers with demands of more than 1000. In rebuttal testimony, the Company has made a significant change to its estimate of the peak demands of these customers.

1 It is unclear how the original estimates were made, but the estimates in the 2 rebuttal testimony were made in a different manner. I have reviewed confidential 3 data from BEAR customers in IP territory and elsewhere that indicates that the 4 Company's original estimate of the number of large customers was too small. 5 However, the same data suggests to me that some of the MDQs shown on IP Exh. 7.29 are too high. According to this revision, only 10 customers have demands 6 7 less than 1000 therms per day, and 69 customers have demands of more than 1000 8 therms. (IP Exh. 7.29) That suggests that the Company would have overcollected 9 revenues if its original rates were used, as 40 additional customers would have 10 paid \$5,640 more annually in customer charges than the Company had projected.

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#### Q. How does this result in changing the allocation of customer-related plant?

This in itself would not. However, the Company has also made a new analysis of the appropriate breakpoints for facilities costs, and has changed the numbers it uses to allocated meter and meter installation costs. For some reason the Company chose to create weighted allocators based on numbers from my Exh. LS-3 that were essentially mislabeled and did not represent installed meter costs. The numbers that result from my Exh. LS-3, as noted above, do not in fact correctly represent meter costs. The Company describes this as "proxy meter cost" and utilizes this to develop allocation factors for SC66.

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#### Q. Is this substitution correct?

23 A. No, it is not. As I stated at the beginning of my testimony, Exh. LS-3, which was 24 only intended to illustrate differences in meter costs among customers, was 25 mislabeled, and in no way should have been used as this proxy meter cost.

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#### Q. Please explain the problem in LS-3.

The problem originated in a mislabeling in my exhibit, resulting primarily from working with a hard copy of the Company's spreadsheet on meter installation and meter costs. In order to compare meter and meter installation costs for different size customers, LS-3 intended to add together per customer meter installation

costs and meter costs for customers served on different meters. This was all based on Company data. However, the exhibit adds together a column titled "Total Installation Cost", divided by the numbers of customers, and the meter cost per customer. This was misleading, since the "Total Installation" column is on a different basis from the meter cost, and does not represent the actual cost of installing meters, which is found in the column on the Company's spreadsheet labeled "labor cost". "Total Installation" actually represents an allocated cost – all costs booked as meter installation costs, allocated on the basis of labor cost. In contract, the meter cost per customer that was used is the actual cost of the meter, not the allocation of booked costs. <sup>1</sup> This essentially uses an inflated number to allocate to SC 66, while using the correct lower numbers to allocate to all other customer classes. I have prepared Exhibit LS-7, that correctly adds meter installation and meter costs. This shows that the cost for the smallest customers is \$1,118 and for the largest customer is \$20,543. There is a large range in costs within the proposed class, but it is not as large as Exh. LS-3 appeared to indicate.

### Q. Is there any justification for using the cost per customer numbers from Exh. LS-3 in developing customer allocators?

A. No, there is not. If the Company wanted to reexamine the breakpoints in SC 66 for different customer costs, it should have done so by simply calculating the meter installation and meter cost on a per customer basis, from its own data, as is shown on Exh. LS-7, which is attached to this testimony.

#### III. 32 DEGREE TRIGGER FOR DEMAND CHARGE

### Q. Has Mr. Jones provided any support for setting the trigger for the SC 66 demand charge at 32 degrees?

A. Mr. Jones has <u>not</u> demonstrated that setting the demand charge to take effect at this trigger is cost-based. Mr. Jones does not argue that grain dryers using gas at

Exh. LS-3 contains a column that is mislabeled "Materials cost". This is actually the difference between meter installation costs and Total meter installation costs (ie. Including the allocation of other booked plant).

32 degrees would create any reliability problems, which is consistent with the fact that load at 32 degrees is much higher than the Company's design peak load. He does however state that it is appropriate to set the trigger under SC 66 at 32 degrees because this rate condition "...could allow system planners to increase the temperature used for planning, which could expand the peak load available to new or expanding customers." (Exh. IP7.19 p. 21)

### Q. Is Mr. Jones' rationale supported by ratemaking principles?

A. No. Mr. Jones is arguing that grain dryers should be required to reduce their usage on days that they are not contributing to system peak (days with temperatures somewhere between approximately 20 degrees and 30 degrees) in order for the Company to defer construction of additional plant to meet the needs of new customers. Mr. Jones could just as well have recommended that all residential customers be required to keep their thermostats at no higher than 60 degrees when temperatures fall below 30 degrees so the company can add new load without adding new capacity. There is no rational justification for forcing grain dryers to be responsible for helping the company defer new construction. More importantly, penalizing grain dryers for usage when temperatures fall below 32 degrees does not improve the Company's current ability to meet its system peaks.

### Q. What is the impact of this condition on grain dryers?

23 A. To grain dryers, this rate feature takes away a right that they currently have.

Although grain dryers rarely use gas when it is colder than 32 degrees, there are circumstances when it is useful or necessary to dry grain at temperatures slightly

below 32. Another problem is that the term would penalize use when

temperatures were projected to be below 32, not when they actually were.

Essentially, the Company is creating the ability to serve more load from existing

facilities while providing no compensating benefit to grain dryers.

#### Q. Would it be reasonable to limit grain dryers' use at any time?

It would be reasonable to limit grain dryers use when gas demand was at or near peak loads. The Company's peaks have occurred when temperatures have been in the teens. Since I believe the grain dryer cost allocation should be based on the assumption that the grain dryers on not on at the time of peak (an assumption with which the Company agrees), I have no problem with a term that would penalize grain dryers for using gas when temperatures were projected to be less than twenty degrees. I do not think this condition will have any impact on grain dryers' normal usage, as I understand that they do not use gas when it get this cold, but such a condition would provide an additional assurance to the Company that this load was not on at the time of peak. Although this temperature point would not normally reflect the Company's peak load, it would seem that a missed forecast could result in a day that was projected to be twenty actually being in the low teens.

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### IV. CONCLUSION

### 17 Q. Have you submitted a revised cost of service study?

A. No. I have not. The electronic version of the rebuttal cost of service that was submitted by the Company was once again a "protected" version, so that it was not possible to modify it for the meter and meter installation cost errors. I have doubts about the revised service allocator, although I agree this allocator required modification. There are enough problems with the cost of service study that I do not think it should be used as more than a guide to the approximate percentage increases charged to each class.

- Q. Mr. Lazare testified that the Company's COSS "... is ill suited to the free exchange of information." (Lazare p. 17) Do you agree?
- A. I agree that it has been very difficult to address cost allocation because of this study. There are numerous steps in cost allocation that are not reviewable. The original study that was provided was a protected version that could not be used at all. A subsequent version allowed some cells to be modified, but still blocked

access to some input cells. The Company did finally provide a workable version of the model, but then as I noted above, the study submitted in rebuttal was of no use to me.

A.

### Q. How do you recommend establishing the revenue target for SC 66?

I recommend that the Company rerun its cost of service model with the allocation of demand costs for the grain dryer rate being based on the same methodology as used for other customers – that is average use is total use divided by 365 and peak use is zero. I believe that a proper cost of service based SC 66 would then be within reasonable bounds. In no event, however, should the percentage increase for SC 66 be more than 50% higher than the system average increase. Such a limitation would further the goal of rate continuity and aid in preventing grain dryers from leaving the system by going out of business or using propane. Based on the current Company rebuttal filing, this would mean the SC 66 increase would be no more than 26.6%. The Company's rebuttal rate design would increase the system by 17.7% on average, but increase SC 66 by 99%. I would recommend that a continuity guideline be applied to all customers.

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### Q. What do you recommend regarding SC 66's rate design?

I recommend that SC 66 should have a much lower customer charge than proposed. My original testimony recommended that the customer charge should be no higher than \$400 for any customer on SC 66. However, even this charge will cause many bills to be higher than they would be on alternative rates. I therefore recommend that the customer charges for SC 66 customers be set at the same customer charge that they would pay on the alternative rate for which they are eligible. The commodity charge would then be determined by the amount necessary to collect the remaining revenue to achieve the revenue target, determined by the maximum percentage increase, as discussed above.

### Q. Does this conclude your testimony?

31 A. Yes, it does.

Exhibit LS - 7

Variation in Meter and Meter Installation Costs by Meter Type Rate Schedule 67								Breakdown of meters by MDQ		
					Installation		Total			
No of		Hours per		Labor	Cost		Cost per			
Meters	Meter Type	Installation	Labor Rate	Cost	per Meter	Meter Cost	<u>Customer</u>		over 1000	<u>under 1000</u>
4	23M125	160	\$65.57	\$41,965	\$10,491	\$4,094	\$14,585		2	2
1	38M175	139	\$65.57	\$9,114	\$9,114	\$5,856	\$14,970		1	
2	38M125	139	\$65.57	\$18,228	\$9,114	\$5,318	\$14,432			2
2	38M175NC	139	\$65.57	\$18,228	\$9,114	\$3,294	\$12,408		2	
4	16M175	139	\$65.57	\$36,457	\$9,114	\$2,767	\$11,881		3	1
6	16M125	79	\$65.57	\$31,080	\$5,180	\$2,767	\$7,947		3	3
10	11M125	74	\$65.57	\$48,522	\$4,852	\$2,029	\$6,881		5	5
8	11M175	74	\$65.57	\$38,817	\$4,852	\$2,029	\$6,881		2	6
1	7M125	70	\$65.57	\$4,590	\$4,590	\$1,752	\$6,342		1	
9	7M175	70	\$65.57	\$41,309	\$4,590	\$1,752	\$6,342		4	5
2	2300	23	\$65.57	\$3,016	\$1,508	\$2,500	\$4,008			2
29	5000	23	\$65.57	\$43,735	\$1,508	\$2,029	\$3,537		7	22
2	500B	23	\$65.57	\$3,016	\$1,508	\$952	\$2,460		1	1
1	3M175	13	\$65.57	\$852	\$852	\$952	\$1,804			1
1	80B	4	\$65.57	\$262	\$262	\$856	\$1,118		1	
									29	48
Rate Schedule 68										
2	23M125	160	\$65.57	\$20,982	\$10,491	\$4,094	\$14,585		1	1
5	38M125	139	\$65.57	\$45,571	\$9,114	\$5,318	\$14,432		3	2
1	56M125	200	\$65.57	\$13,114	\$13,114	\$7,429	\$20,543		1	
1	80B	4	\$65.57	\$262	\$262	\$856	\$1,118			1